SRS-A31/A41/PC41

SERVICE MANUAL

US Model
SRS-A41/PC41
Canadian Model
AEP Model
UK Model
E Model
SRS-A31/A41/PC41
Tourist Model
SRS-A41
Australian Model
SRS-PC41

Photo: SRS-A41

SPECIFICATIONS

Amplifier section
Power output 3 W + 3 W
Input impedance 4.7 kilohms (at 1 kHz)

Speaker section
System Full-range bass reflex type
Speaker unit Full-range (magnetically shielded): ø 65 mm ($2\,^5/_8$ in.)
Nominal impedance 6 ohms (OFF/DIRECT)
Rated input power 3 W (OFF/DIRECT)

General
Power requirement DC 9 V, six size AA (R6) batteries (left speaker only)
Inputs Input cord
left: stereo miniplug (1.0 m) (SRS-A31/A41)
left: stereo miniplug (2.0 m) (SRS-PC41)
right: monaural miniplug (1.0 m) (SRS-A31/A41)
right: monaural miniplug (2.0 m) (SRS-PC41)

Battery life (at 5 mW + 5 mW output)
Approx. 17 hours with Sony batteries R6P (SR),
Approx. 35 hours with Sony alkaline batteries LR6 (SG)
Dimensions Approx. 95 × 205 × 110 mm (w/h/d) ($3\,^3/_4 \times 8\,^1/_8 \times 4\,^3/_8$ in.)
Mass Left speaker: Approx. 580 g (1 lb. 4 oz.), Right speaker: Approx. 500 g (1 lb 2 oz.) not incl. batteries
Supplied accessory
AC power adaptor (SRS-A41/PC41)

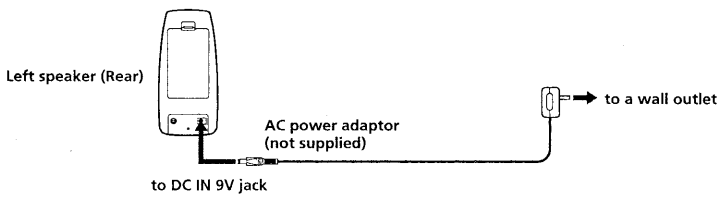
Design and specifications are subject to change without notice.

ACTIVE SPEAKER SYSTEM

SONY

Power Sources

Using on house current



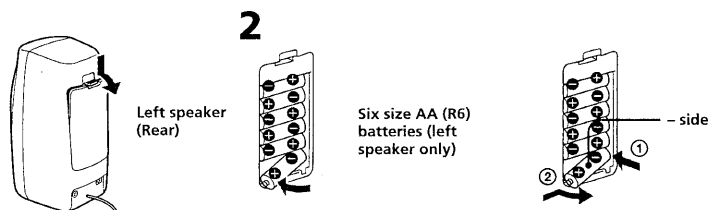
When the AC power adaptor is connected to the system, internal batteries are automatically disconnected.

Note on the AC power adaptor

Use only the AC-E90HG AC power adaptor (not supplied). Do not use any other AC power adaptor.

Polarity of the plug

Battery installation



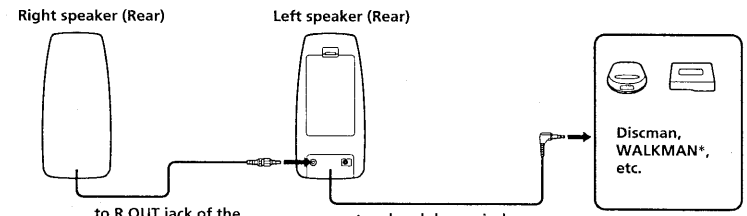
Note

Remove the batteries as illustrated.

Battery Replacement

When the batteries are weak, the POWER indicator will start flickering and become faint, or the playback sound will be distorted or unstable.
In such a case, replace all the batteries with new ones.
For battery life, see "Specifications".

Connections



* WALKMAN is a registered trademark of Sony Corporation.

Connect the left speaker to the source equipment.

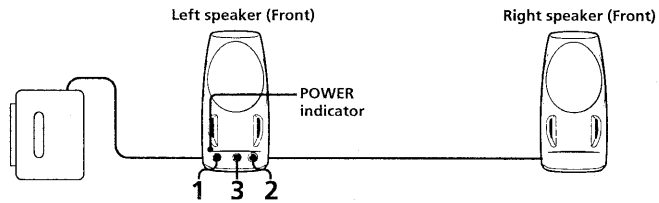
When the system is connected to a monaural jack of a radio, etc., the sound may only come through the left speaker. In such a case, use the optional Sony plug adaptor PC-236MS.
The sound will come through both speakers.

To connect to a stereo phone-type headphones jack

Use the optional PC-234S plug adaptor or RK-G138 connecting cord.

How to Use

Listening to the sound through the built-in amplifier



1 **Press the POWER switch (⏍ ON).**
The POWER indicator lights up.

2 **Adjust the VOLUME control.**

3 **Press the MEGA BASS switch (⏍ ON) to reinforce the bass.**
Turn off the MEGA BASS (Walkman) or BASS BOOST (Discman, etc.) function as it may cause sound distortion.
Press the switch again (⏍ OFF) to cancel the bass boost function.

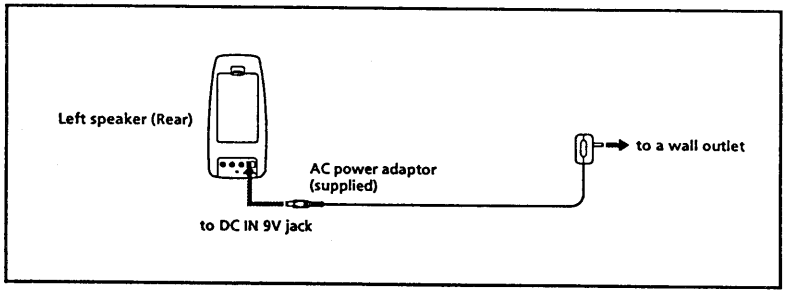
After listening, press the POWER switch (⏍ OFF/DIRECT).
The POWER indicator goes off.

Listening to the sound without the built-in amplifier

Set the POWER switch (⏍ OFF/DIRECT). In this case, the VOLUME control and the MEGA BASS switch do not operate. Adjust the volume with the connected equipment.

Power Sources

Using on house current

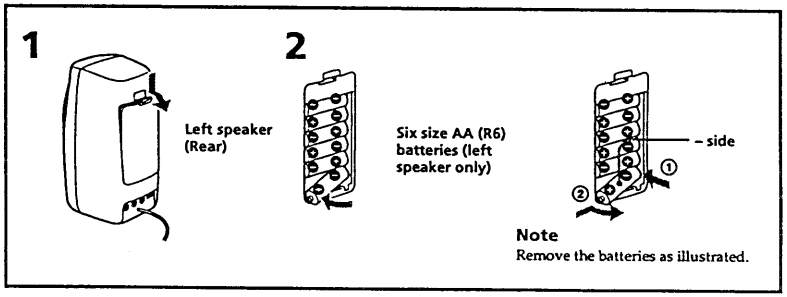


When the AC power adaptor is connected to the system, internal batteries are automatically disconnected.

Note on the AC power adaptor
Use only the supplied AC power adaptor. Do not use any other AC power adaptor.

Polarity of the plug

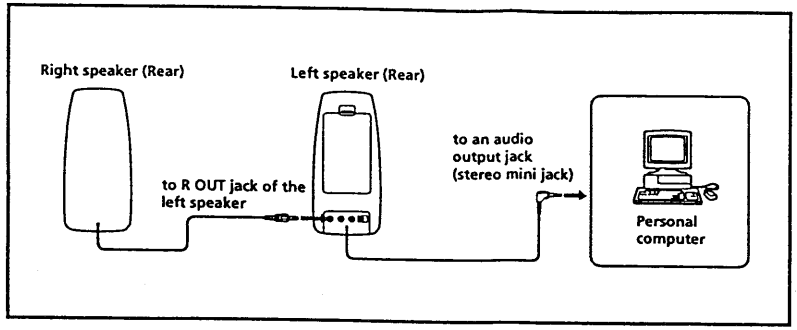
Battery installation



Note
Remove the batteries as illustrated.

Battery Replacement
When the batteries are weak, the POWER indicator will start flickering and become faint, or the playback sound will be distorted or unstable.
In such a case, replace all the batteries with new ones.
For battery life, see "Specifications".

Connections

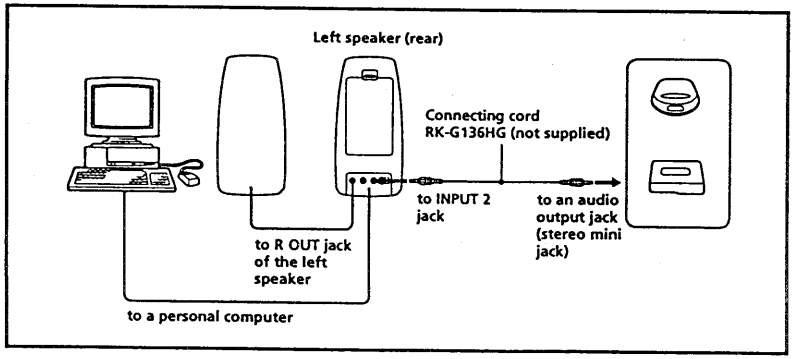


Connect the left speaker to the source equipment.

When the system is connected to a monaural jack of a radio, etc., the sound may only come through the left speaker. In such a case, use the optional Sony plug adaptor PC-236MS.
The sound will come through both speakers.

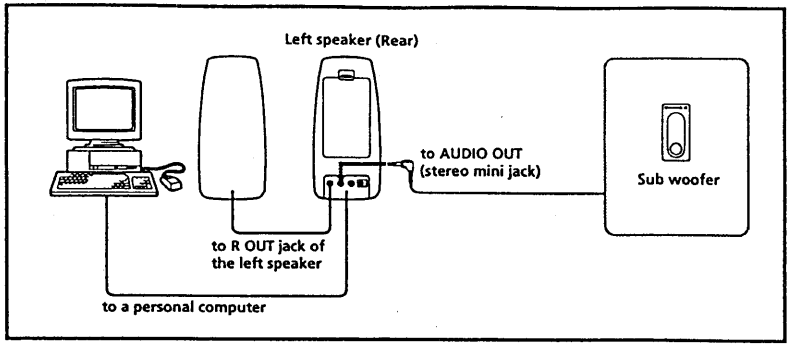
To connect to a stereo phone-type headphones jack
Use the optional PC-234S plug adaptor or RK-G138 connecting cord.

Connecting to a Discman, Walkman, etc.



Note
When two types of equipment are connected to the system and are played at the same time, the sound from both of them will come out of the speakers.
When you wish to play only one equipment, make sure that the other equipment is turned off or its volume is turned down.

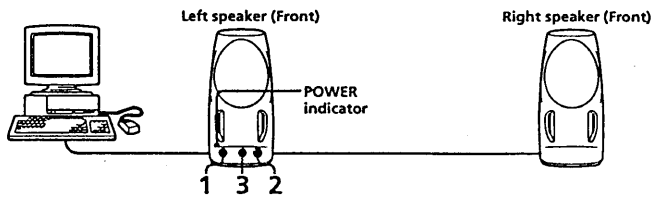
Connecting to a sub woofer



Connect a sub woofer to AUDIO OUT jack (stereo mini jack). The volume of the connected speaker system is adjustable with the VOLUME control.

How to Use

Listening to the sound through the built-in amplifier



1 **Press the POWER switch (⏏ ON).**
The POWER indicator lights up.

2 **Adjust the VOLUME control.**

3 **Press the IBB switch (⏏ ON) to reinforce the bass.**
Turn off the MEGABASS (Walkman) or BASS BOOST (Discman, etc.) function as it may cause sound distortion.
Press the switch again (⏏ OFF) to cancel the bass boost function.

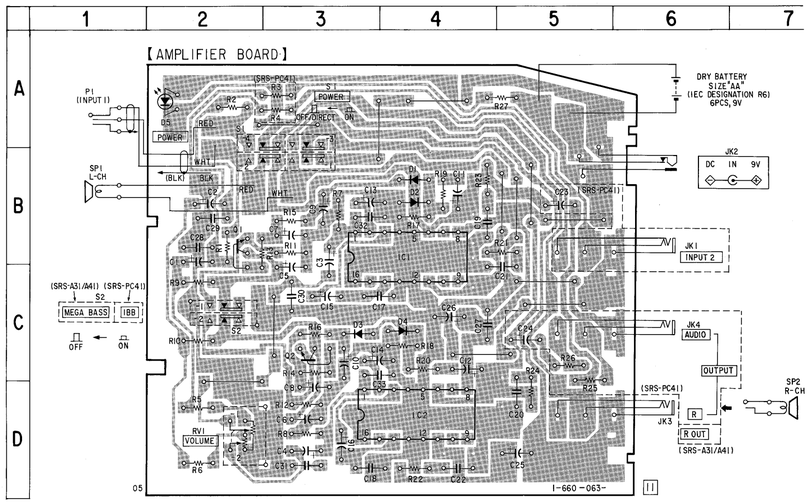
After listening, press the POWER switch (⏏ OFF/DIRECT).
The POWER indicator goes off.

Listening to the sound without the built-in amplifier

Set the POWER switch (⏏ OFF/DIRECT). In this case, the VOLUME control and the IBB switch do not operate. Adjust the volume with the connected equipment.

SECTION 2
DIAGRAMS

2-1. PRINTED WIRING BOARD



- **Semiconductor Location**

Ref. No.	Location
D1	B-4
D2	B-4
D3	C-3
D4	C-4
D5	A-2
IC1	B-4
IC2	D-4
Q1	B-2
Q2	C-3

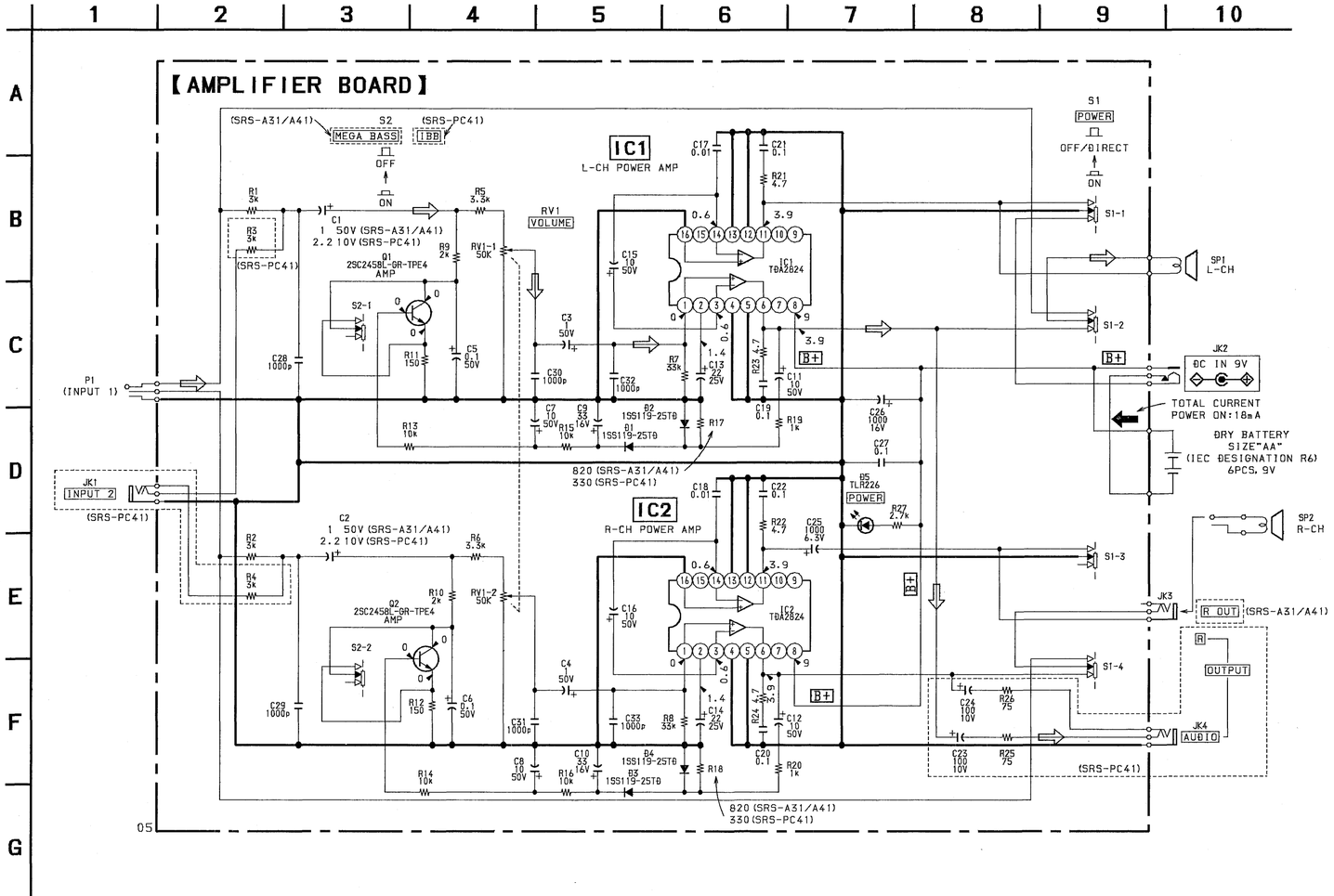
Note on Printed Wiring Board:

- ○—— : parts extracted from the component side.
- —— : parts extracted from the conductor side.

Note on Schematic Diagram:

- All capacitors are in μF unless otherwise noted. pF: μμF 50 WV or less are not indicated except for electrolytics and tantalums.
- All resistors are in Ω and ¼ W or less unless otherwise specified.
- □ : panel designation.
- B+ : B + Line.
- Power voltage is dc 9 V and fed with regulated dc power supply from external power voltage jack.
- Voltages are dc with respect to ground under no-signal conditions.
- Voltages are taken with a VOM (Input impedance 10 MΩ). Voltage variations may be noted due to normal production tolerances.
- Signal path. ⇨ :

2-2. SCHEMATIC DIAGRAM

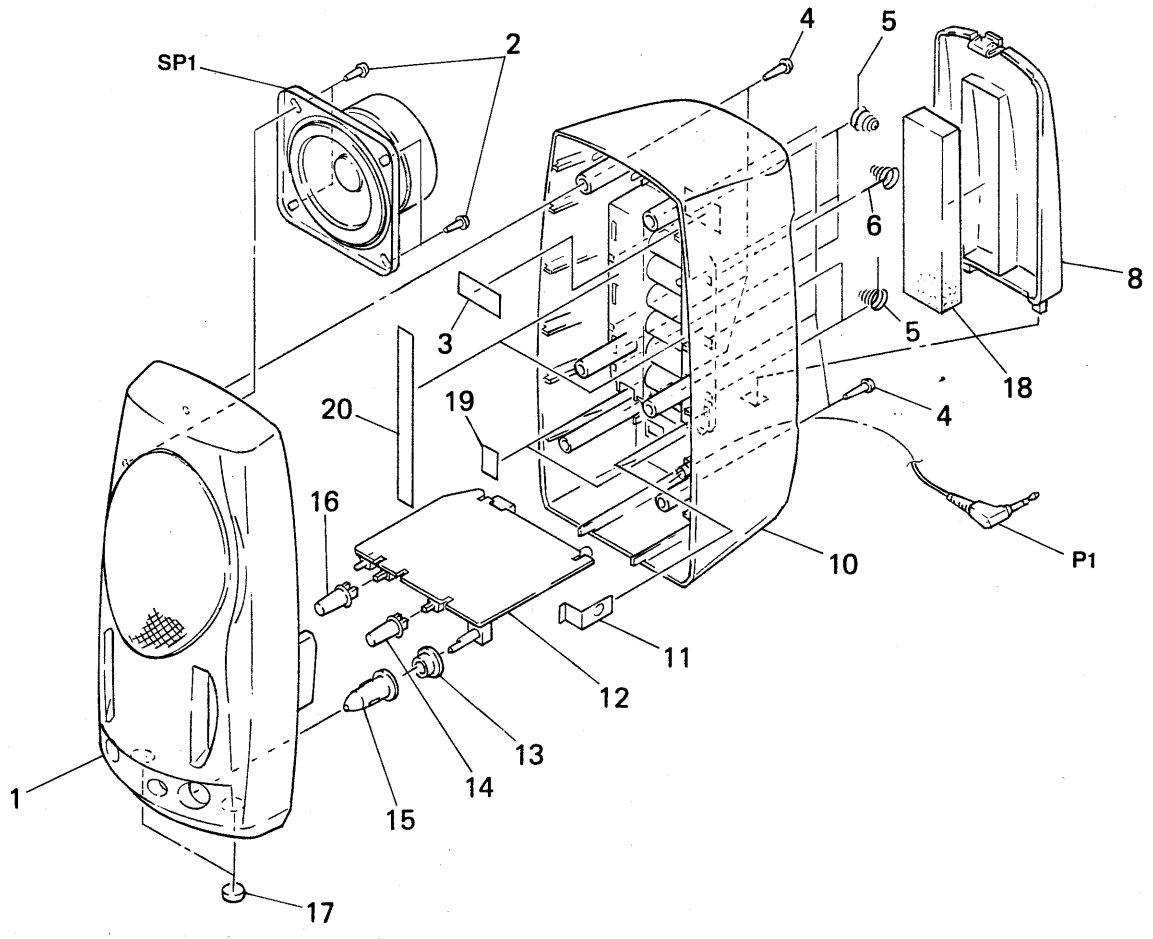


SECTION 3
EXPLODED VIEWS

NOTE:

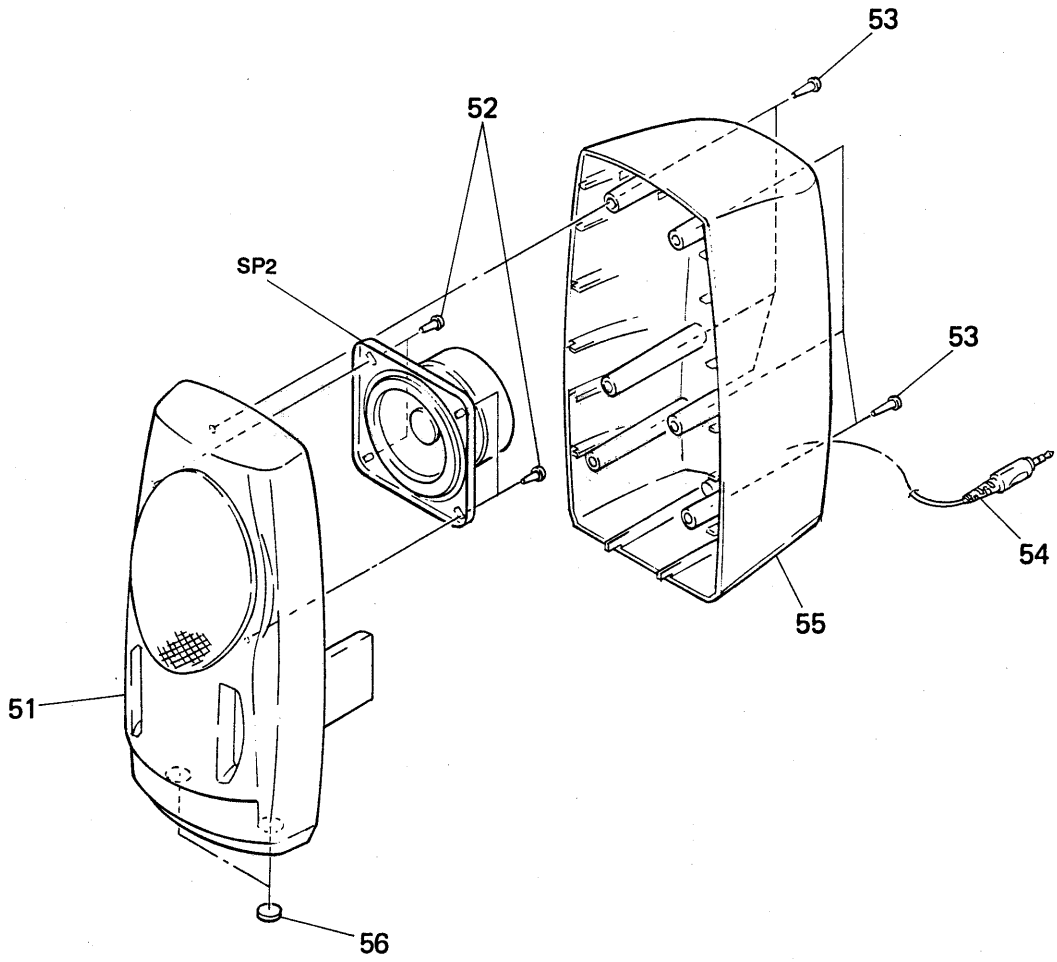
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- Color Indication of Appearance Parts
  Example:
  KNOB, BALANCE (WHITE) . . . (RED)
  ↑ ↑
  Parts Color Cabinet's Color
- Items marked " * " are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- The mechanical parts with no reference number in the exploded views are not supplied.
- Accessories and packing materials are given in the last of the electrical parts list.

(1) CABINET SECTION (L)



Ref. No.	Part No.	Description	Remark
1	X-4947-090-1	CABINET (L) ASSY, FRONT (BLACK) (A41)	
1	X-4947-094-1	CABINET (L) ASSY, FRONT (BLACK) (A31)	
1	X-4947-096-1	CABINET (L) ASSY, FRONT (WHITE) (PC41)	
2	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
3	3-555-858-01	CUSHION (25X15X0.5)	
4	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
5	4-981-125-01	SPRING (1), BATTERY COIL	
6	4-967-264-01	SPRING (MINUS), BATTERY COIL	
8	4-981-121-01	LID, BATTERY CASE (BLACK) (A31, A41)	
8	4-981-121-11	LID, BATTERY CASE (WHITE) (PC41)	
10	4-981-119-01	CABINET (L), REAR (BLACK) (A41)	
10	4-981-119-11	CABINET (L), REAR (WHITE) (PC41)	
10	4-981-119-31	CABINET (L), REAR (BLACK) (A31)	
11	2-143-931-01	TERMINAL, PLUS BATTERY	
* 12	1-660-063-11	AMPLIFIER BOARD	
13	2-141-216-01	SPACER (VOL)	
14	4-981-127-01	BUTTON (BASS) (BLACK) (A31, A41)	
14	4-981-127-11	BUTTON (BASS) (WHITE) (PC41)	
15	4-981-123-01	KNOB (VOL) (BLACK) (A31, A41)	
15	4-981-123-11	KNOB (VOL) (WHITE) (PC41)	
16	4-981-124-01	BUTTON (POWER) (BLACK) (A31, A41)	
16	4-981-124-11	BUTTON (POWER) (WHITE) (PC41)	
17	4-981-856-01	FOOT, RUBBER	
18	4-981-128-01	CUSHION	
19	4-982-232-01	SHEET, BLIND	
20	9-911-835-XX	CUSHION, F	
P1	1-559-891-31	CORD (WITH PLUG) (L) (INPUT 1) (BLACK) (A31, A41)	
P1	1-559-891-41	CORD (WITH PLUG) (L) (INPUT 1) (WHITE) (PC41)	
SP1	1-505-301-11	SPEAKER (L) (A31, A41:US, PC41:US)	
SP1	1-505-293-11	SPEAKER (L) (A41:AEP/UK/E/Tourist, PC41:AEP/UK/E/Australian)	

(2) CABINET SECTION (R)



Ref. No.	Part No.	Description	Remark
51	X-4947-091-1	CABINET (R) ASSY, FRONT (BLACK) (A41)	
51	X-4947-095-1	CABINET (R) ASSY, FRONT (BLACK) (A31)	
51	X-4947-097-1	CABINET (R) ASSY, FRONT (WHITE) (PC41)	
52	7-685-646-79	SCREW +BVTP 3X8 TYPE2 N-S	
53	7-685-648-79	SCREW +BVTP 3X12 TYPE2 N-S	
54	1-769-080-11	CORD (WITH PLUG) (R) (BLACK) (A31, A41)	
54	1-775-692-21	CORD (WITH PLUG) (R) (WHITE) (PC41)	

Ref. No.	Part No.	Description	Remark
55	4-981-120-01	CABINET (R), REAR (BLACK) (A41)	
55	4-981-120-11	CABINET (R), REAR (WHITE) (PC41)	
55	4-981-120-31	CABINET (R), REAR (BLACK) (A31)	
56	4-981-856-01	FOOT, RUBBER	
SP2	1-505-301-11	SPEAKER (R) (A31, A41:US, PC41:US)	
SP2	1-505-293-11	SPEAKER (R) (A41:AEP/UK/E/Tourist, PC41:AEP/UK/E/Australian)	

SECTION 4
ELECTRICAL PARTS LIST

AMPLIFIER

NOTE:
- Due to standardization, replacements in the parts list may be different from the parts specified in the diagrams or the components used on the set.
- -XX and -X mean standardized parts, so they may have some difference from the original one.
- RESISTORS
  All resistors are in ohms.
  METAL:Metal-film resistor.
  METAL OXIDE: Metal oxide-film resistor.
  F:nonflammable
- Abbreviation
  E41:230V AC area E92:120V AC area
- Items marked "*" are not stocked since they are seldom required for routine service. Some delay should be anticipated when ordering these items.
- SEMICONDUCTORS
  In each case, u:μ, for example:
  uA..: μA.. uPA..: μPA..
  uPB..: μPB.. uPC..: μPC.. uPD..: μPD..
- CAPACITORS
  uF: μF
- COILS
  uH: μH

When indicating parts by reference number, please include the board.

The components identified by mark ⚠ or dotted line with mark. ⚠ are critical for safety. Replace only with part number specified.

Les composants identifiés par une marque ⚠ sont critiques pour la sécurité.
Ne les remplacer que par une pièce portant le numéro spécifié.

Ref. No.	Part No.	Description			Remark
*	1-660-063-11	AMPLIFIER BOARD			
		**********			
		< CAPACITOR >			
C1	1-124-903-11	ELECT	1uF	20%	50V (A31/A41)
C1	1-124-925-11	ELECT	2.2uF	20%	10V (PC41)
C2	1-124-903-11	ELECT	1uF	20%	50V (A31/A41)
C2	1-124-925-11	ELECT	2.2uF	20%	10V (PC41)
C3	1-124-903-11	ELECT	1uF	20%	50V
C4	1-124-903-11	ELECT	1uF	20%	50V
C5	1-126-956-00	ELECT	0.1uF	20%	50V
C6	1-126-956-00	ELECT	0.1uF	20%	50V
C7	1-126-964-11	ELECT	10uF	20%	50V
C8	1-126-964-11	ELECT	10uF	20%	50V
C9	1-104-663-11	ELECT	33uF	20%	16V
C10	1-104-663-11	ELECT	33uF	20%	16V
C11	1-126-964-11	ELECT	10uF	20%	50V
C12	1-126-964-11	ELECT	10uF	20%	50V
C13	1-126-233-11	ELECT	22uF	20%	50V
C14	1-126-233-11	ELECT	22uF	20%	50V
C15	1-126-964-11	ELECT	10uF	20%	50V
C16	1-126-964-11	ELECT	10uF	20%	50V
C17	1-130-483-00	MYLAR	0.01uF	5%	50V
C18	1-130-483-00	MYLAR	0.01uF	5%	50V
C19	1-130-495-00	MYLAR	0.1uF	5%	50V
C20	1-130-495-00	MYLAR	0.1uF	5%	50V
C21	1-130-495-00	MYLAR	0.1uF	5%	50V
C22	1-130-495-00	MYLAR	0.1uF	5%	50V
C23	1-126-933-11	ELECT	100uF	20%	10V (PC41)
C24	1-126-933-11	ELECT	100uF	20%	10V (PC41)
C25	1-126-916-11	ELECT	1000uF	20%	6.3V
C26	1-126-952-11	ELECT	1000uF	20%	16V
C27	1-162-851-11	CERAMIC	0.1uF		16V
C28	1-162-294-31	CERAMIC	0.001uF	10%	50V
C29	1-162-294-31	CERAMIC	0.001uF	10%	50V
C30	1-162-294-31	CERAMIC	0.001uF	10%	50V
C31	1-162-294-31	CERAMIC	0.001uF	10%	50V
C32	1-162-294-31	CERAMIC	0.001uF	10%	50V
C33	1-162-294-31	CERAMIC	0.001uF	10%	50V
		< DIODE >			
D1	8-719-911-19	DIODE	1SS119		
D2	8-719-911-19	DIODE	1SS119		
D3	8-719-911-19	DIODE	1SS119		
D4	8-719-911-19	DIODE	1SS119		
D5	8-719-812-26	DIODE	TLR226 (POWER)		
		< IC >			
IC1	8-759-194-70	IC	TDA2824		
IC2	8-759-194-70	IC	TDA2824		
		< JACK >			
JK1	1-566-822-21	JACK (INPUT 2) (PC41)			
JK2	1-569-966-11	JACK, DC (DC IN 9V)			
JK3	1-566-822-21	JACK (R OUT) (A31/A41)			
JK3	1-566-822-21	JACK (OUTPUT R) (PC41)			
JK4	1-566-822-21	JACK (OUTPUT AUDIO) (PC41)			
		< TRANSISTOR >			
Q1	8-729-205-83	TRANSISTOR	2SC2458L-GR		
Q2	8-729-205-83	TRANSISTOR	2SC2458L-GR		
		< RESISTOR >			
R1	1-247-842-11	CARBON	3K	5%	1/4W
R2	1-247-842-11	CARBON	3K	5%	1/4W
R3	1-247-842-11	CARBON	3K	5%	1/4W (PC41)
R4	1-247-842-11	CARBON	3K	5%	1/4W (PC41)
R5	1-249-423-11	CARBON	3.3K	5%	1/4W F
R6	1-249-423-11	CARBON	3.3K	5%	1/4W F
R7	1-249-435-11	CARBON	33K	5%	1/4W
R8	1-249-435-11	CARBON	33K	5%	1/4W
R9	1-247-838-00	CARBON	2K	5%	1/4W
R10	1-247-838-00	CARBON	2K	5%	1/4W

Ref. No.	Part No.	Description			Remark
R11	1-249-407-11	CARBON	150	5%	1/4W F
R12	1-249-407-11	CARBON	150	5%	1/4W F
R13	1-249-429-11	CARBON	10K	5%	1/4W
R14	1-249-429-11	CARBON	10K	5%	1/4W
R15	1-249-429-11	CARBON	10K	5%	1/4W
R16	1-249-429-11	CARBON	10K	5%	1/4W
R17	1-249-411-11	CARBON	330	5%	1/4W (PC41)
R17	1-249-416-11	CARBON	820	5%	1/4W F (A31/A41)
R18	1-249-411-11	CARBON	330	5%	1/4W (PC41)
R18	1-249-416-11	CARBON	820	5%	1/4W F (A31/A41)
R19	1-249-417-11	CARBON	1K	5%	1/4W F
R20	1-249-417-11	CARBON	1K	5%	1/4W F
R21	1-249-389-11	CARBON	4.7	5%	1/4W F
R22	1-249-389-11	CARBON	4.7	5%	1/4W F
R23	1-249-389-11	CARBON	4.7	5%	1/4W F
R24	1-249-389-11	CARBON	4.7	5%	1/4W F
R25	1-247-804-11	CARBON	75	5%	1/4W (PC41)
R26	1-247-804-11	CARBON	75	5%	1/4W (PC41)
R27	1-249-422-11	CARBON	2.7K	5%	1/4W F

< SWITCH >

S1	1-692-040-11	SWITCH, PUSH (1 KEY) (POWER)
S2	1-570-913-11	SWITCH, PUSH (MEGA BASS) (A31/A41)
S2	1-570-913-11	SWITCH, PUSH (IBB) (PC41)

< VARIABLE RESISTOR >

RV1	1-225-279-11	RES, VAR 50K/50K (VOLUME)

****

MISCELLANEOUS

****

54	1-769-080-11	CORD (WITH PLUG) (R) (BLACK) (A31, A41)
54	1-775-692-21	CORD (WITH PLUG) (R) (WHITE) (PC41)
P1	1-559-891-31	CORD (WITH PLUG) (L) (INPUT 1) (BLACK) (A31, A41)
P1	1-559-891-41	CORD (WITH PLUG) (L) (INPUT 1) (WHITE) (PC41)
SP1	1-505-301-11	SPEAKER (L) (A31, A41:US, PC41:US)
SP1	1-505-293-11	SPEAKER (L) (A41:AEP/UK/E/Tourist, PC41:AEP/UK/E)
SP2	1-505-301-11	SPEAKER (R) (A31, A41:US, PC41:US)
SP2	1-505-293-11	SPEAKER (R) (A41:AEP/UK/E/Tourist, PC41:AEP/UK/E)

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Ref. No.	Part No.	Description	Remark
		ACCESSORIES & PACKING MATERIALS	
		**********	
⚠	1-465-817-31	ADAPTOR, AC (AC-96NES) (A41:AEP/E41, PC41:AEP/E41)	
⚠	1-467-731-21	ADAPTOR, AC (A41:UK, PC41:UK)	
⚠	1-467-852-21	ADAPTOR, AC (PC41:Australian)	
⚠	1-693-007-21	ADAPTOR, AC (AC-S195) (A41:Tourist)	
⚠	1-693-029-11	ADAPTOR, AC (AC-96NB) (A41:Canadian/E92, PC41:US/Canadian/E92)	
	3-856-031-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, PORTUGUESE, ITALIAN) (A31, A41:Canadian/AEP/UK/E/Tourist)	
	3-856-031-21	MANUAL, INSTRUCTION (ENGLISH) (A41:US)	
	3-856-031-31	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, PORTUGUESE, ITALIAN) (A31:AEP/UK)	
	3-856-032-11	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, PORTUGUESE, ITALIAN) (PC41:Canadian/AEP/UK/E)	
	3-856-032-21	MANUAL, INSTRUCTION (ENGLISH) (PC41:US)	
	3-856-032-31	MANUAL, INSTRUCTION (ENGLISH, FRENCH, GERMAN, SPANISH, DUTCH, SWEDISH, PORTUGUESE, ITALIAN) (A41:AEP/E)	

The components identified by mark ⚠ or dotted line with mark ⚠ are critical for safety. Replace only with part number specified.	Les composants identifiés par une marque ⚠ sont critiques pour la sécurité. Ne les remplacer que par une pièce portant le numéro spécifié.

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